Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. Cancelled

Claim 2 (Currently Amended): An The asymmetric satellite based terminal device of claim 1 including configured to receive Internet data from a satellite using a standard TCP/IP stack, the terminal device comprising:

a personal computer-having comprising:

a modem in communication with an Internet Service Provider (ISP);

an expansion card based satellite receiver in communication with a Network Operation Center (NOC), the NOC having a range of IP addresses assigned thereto; and

an operating system, the operating system including the standard TCP/IP stack;

a first driver configured to access the expansion card based satellite receiver; and

a second driver configured to access the modem;

wherein the first driver is further configured to route data received from the satellite receiver card to the standard TCP/IP stack, and the second driver is further configured to route request data from the standard TCP/IP stack to the modem via the second driver, and the modem is configured to send the request data to the ISP, the request data as sent from the modem having a source address from the range of IP addresses assigned to the NOC, whereby asymmetric satellite communications is enabled.

Claim 3 (Currently Amended): An asymmetric satellite system comprising—the an asymmetric satellite based terminal device-of-elaim 1 configured to receive Internet data from a satellite using a standard TCP/IP stack, a network operations center located at a distance from the asymmetric satellite based terminal device, and an Internet having a plurality of remote hosts,

4

inexemple

Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

wherein the second driver terminal device is configured to send web page request data to the remote hosts with a return address of the network operations center.

Claim 4 (Currently Amended): The asymmetric satellite system of claim 3 wherein the network operation center is configured to encapsulate data output to the asymmetric satellite based terminal device from the network operations center in MPEG II packets.

Claim 5 (Currently Amended): The asymmetric satellite system of claim 4 wherein the data includes WEB pages.

Claim 6. Cancelled

Claim 7 (Currently Amended): An asymmetric satellite system comprising a network operations center, an Internet having a plurality of hosts, and a terminal device located at a distance from the network operations center and configured to utilize an IP address belonging to the network operations center such that access requests across the Internet are returned to the network operations center. The asymmetric satellite system of claim 10—wherein the terminal device includes a personal computer having a modem, an expansion card based satellite receiver, and an operating system, the operating system including the standard TCP/IP stack, and an application program for assigning the IP address as a return address of the terminal device, wherein the terminal device is configured to issue requests for web pages with a return address of the network operations center.

Claim 8. Cancelled.

Claim 9 (Currently Amended): An asymmetric satellite based terminal device configured to utilize an IP address belonging to a network operations center, The the asymmetric satellite based terminal device of claim 12 including a personal computer having a modem, an expansion card based satellite receiver, and an operating system, the operating system including the



Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

standard TCP/IP stack, and an application program for assigning the IP address as a return address of the asymmetric satellite based terminal device, wherein the asymmetric satellite based terminal device is configured to issue requests for web pages with a return address of the network operations center.

Claims 10-23. Cancelled

Claim 24 (Original): A method comprising configuring an Internet service provider to return data requested by users from resources which are connected to a first hop via terrestrial links and to return data requested by the users from the resources which are connected to a second hop via a satellite link.

Claim 25. Cancelled

Claim 26 (New): The asymmetric satellite based terminal device of claim 2, wherein the terminal device is dynamically assigned an IP address from the range of IP addresses assigned to the NOC.

Claim 27 (New): The asymmetric satellite based terminal device of claim 2, wherein the terminal device is statically assigned an IP address from the range of IP addresses assigned to the NOC.

Claim 28 (New): The asymmetric satellite based terminal device of claim 27, wherein the IP address is associated with a subscriber of satellite service provided via the NOC.

Claim 29 (New): The asymmetric satellite based terminal device of claim 28, wherein the terminal device is assigned an IP address from the range of IP addresses assigned to the NOC based on a token.



Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

Claim 30 (New): The asymmetric satellite based terminal device of claim 29, wherein the token is in communication with the terminal device and is selected from the group consisting of an access card, a Smartcard, and a data key.

Claim 31 (New): The asymmetric satellite based terminal device of claim 29, wherein the token is entered into the terminal device by a user and is selected from the group consisting of an id value, a password, an id value and a password, an encrypted ID, and an encrypted ID and a password.

Claim 32 (New): The asymmetric satellite system of claim 3, further comprising an Internet Service Provider (ISP) connected between the terminal device and the Internet, wherein the ISP is configured to assign to the terminal device an IP address associated with the network operations center.

Claim 33 (New): The asymmetric satellite system of claim 32, wherein the ISP has a plurality of available IP addresses assigned to the network operations center and is configured to dynamically assign an available IP address of the plurality of available IP addresses to the terminal device.

Claim 34 (New): The asymmetric satellite system of claim 32, wherein the ISP is configured to statically assign the IP address to the terminal device based on the identity of a user of the terminal device.

Claim 35 (New): The asymmetric satellite system of claim 32, wherein the ISP is configured to assign the IP address based on a token.

Claim 36 (New): The asymmetric satellite based terminal device of claim 35, wherein the token is in communication with the terminal device and is selected from the group consisting of an access card, a Smartcard, and a data key.

Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

Claim 37 (New): The asymmetric satellite based terminal device of claim 35, wherein the token is entered into the terminal device by a user and is selected from the group consisting of an id value, a password, an id value and a password, an encrypted ID, and an encrypted ID and password.

Claim 38 (New): The asymmetric satellite system of claim 3, wherein a first host of the remote hosts is connected to the terminal device via a first hop on a terrestrial link, a second host of the remote hosts is connected to the terminal device via a second hop on the terrestrial link, and the ISP is configured to return data from the first host to the terminal device via the terrestrial link and to return data from the second host to the terminal device via a satellite link.

Claim 39 (New): An asymmetric satellite based terminal device comprising:

a modem in communication with an Internet Host via a terrestrial link;

a satellite card in communication with an Internet Host via a satellite link;

a storage device having computer-readable instructions stored thereon for performing steps comprising:

creating an unencapsulated data packet having a source address assigned to a centralized uplink center of a satellite service; and

sending the unencapsulated data packet from the modem to the Internet Host via the terrestrial link.

Claim 40 (New): The asymmetric satellite based terminal device of claim 39, wherein the storage device further includes instructions for performing the step of receiving data at the satellite card from the Internet Host via the satellite link in response to the unencapsulated data packet being sent from the modem.

Claim 41 (New): The asymmetric satellite based terminal device of claim 40, wherein the Internet Host is connected to the modem via a first hop on the terrestrial link, and the storage



Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

device further includes instructions for performing the step of receiving data at the modern from the Internet Host via the terrestrial link in response to the unencapsulated data packet being sent from the modem.

Claim 42 (New): A method for providing asymmetric satellite based service to a terminal device, the method comprising:

creating an unencapsulated data packet having a source address assigned to a centralized uplink center of a satellite network; and

sending the unencapsulated data packet from the terminal device to an Internet Host via a terrestrial link.

Claim 43 (New): The method of claim 42, further comprising, in response to the step of sending, receiving response data at the terminal device from the Internet Host via a satellite link.

Claim 44 (New): The method of claim 42, wherein the Internet Host is connected to the terminal device via a first hop on the terrestrial link, the method further comprising receiving response data at the terminal device from the Internet Host via the terrestrial link in response to the step of sending.

Claim 45 (New): The method of claim 42, further comprising assigning an IP address assigned to an uplink center of a satellite network to the terminal device, wherein, for the step of creating, the source address matches the IP address assigned to the uplink center.

Claim 46 (New): A method for routing data packets at a router connected via a terrestrial link to a satellite based terminal device and an Internet Host, the method comprising:

receiving from the Internet Host at the router a data packet having a destination address of an uplink center of a satellite service;

determining whether the destination address is a local address assigned to a terminal device within a first hop of the router; and

Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

on condition the terminal device is within a first hop of the router, routing the data packet to the terminal device via the terrestrial link.

Claim 47 (New): The method of claim 46, further comprising, on condition the terminal device is not within a first hop of the router, routing the data packet to the uplink center.

Claim 48 (New): A computer-readable medium having computer-readable instructions stored thereon for performing steps comprising:

creating an unencapsulated data packet having a source address assigned to a centralized uplink center of a satellite service; and

sending the unencapsulated data packet from the modem of an asymmetric satellite based terminal device to an Internet Host via a terrestrial link.

Claim 49 (New): The computer-readable medium of claim 48 including further computer-readable instructions for performing the step of receiving data at the terminal device from the Internet Host via a satellite link in response to the unencapsulated data packet being sent from the modem.

Claim 50 (New): The computer-readable medium of claim 48 including further computer-readable instructions for performing the step of assigning an IP address assigned to an uplink center of a satellite network to the terminal device, wherein, for the step of creating, the source address matches the IP address assigned to the uplink center.

Claim 51 (New): A computer-readable medium having computer-readable instructions stored thereon for performing steps comprising:

receiving from an Internet Host at a router a data packet having a destination address of an uplink center of a satellite service;

determining whether the destination address is a local address assigned to a terminal device within a first hop of the router on a terrestrial link; and

Amendment dated March 15, 2004

Reply to Office Action of November 13, 2003

on condition the terminal device is within a first hop of the router, routing the data packet to the terminal device via the terrestrial link.

G G

Claim 52 (New): The computer-readable medium of claim 51 including further computer-readable instructions for performing the step of routing the data packet to the uplink center on condition the terminal device is not within a first hop of the router.